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ABSTRACT

Using the general hypothesis that job quality returns to education are positive for all employment indicators among race and sex groupings, a sample of young adults originally from southern rural areas and small towns was queried concerning the status ranking of their current occupation, income earned, supervisory responsibility, and extent of work autonomy. A mail contact procedure (supplemented by telephone and personal interviews) was conducted in 1979 and produced 964 completed questionnaires from a group previously studied in 1972. Of the respondents, 35.3% were black and 45.5% were female. Educational attainment was associated with occupational status within all race-sex groups. The largest percentage gain in occupational status for both race categories was at the bachelor's level; however, the gain for blacks relative to whites was much greater. Supervisory responsibility was associated with educational level among white males and females but not for blacks. White men and women were more likely to attain better job quality than black men and women at the lowest educational levels, but this difference diminished at the bachelor's level and favored blacks with a post college education. In general, whites achieved more job quality returns to education than blacks, and males accrued more returns to education than females. (BRR)

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Race-Sex Differences in Job Quality Returns Attributed to Education Among Young Rural Adults[1]

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Race-Sex Differences in Job Quality to Education Among Young Rural Adults

Returns to education have been a concern of educators for many years. It is generally agreed among researchers that education and training directly influences vocational choices made and, to a large extent, establish the pattern of career development (Gottfredson and Brown, 1981). A number of studies have investigated the effects of differing levels of educational attainment on career development using classifications of occupations and dollars earned to evaluate the quality of an employment situation (Siegel, 1965; Weiss and Williamson, 1972, 1975; Welch, 1973; Wolff, 1977; King, 1978). Job quality in a broader sense, considering the impact of education on such things as job responsibility and autonomy, and how these returns are distributed by race and sex has not been investigated.

Studies conducted in the 1960's focused on the importance of additional years of education in achieving differential earnings. Becker (1964) and Hansen (1963) found that the nature of secondary and higher education is such that actual completion of an educational program, rather than obtaining only some intermediate amount, is crucial to realizing a higher rate of return for the time invested. Income has been found to be more highly correlated with education than was the sex of the household head, followed in decreasing order by the occupation, being self-employed, having supervisory responsibility, and race. (Hirsch and Segelhorst, 1965).

Other studies, using 1960 U.S. Census data, examined returns to education for blacks and initially found returns to be lower than for whites and that black-white earnings differentials increased at higher levels of education (Siegel, 1965; Hanoch, 1965; Thurow, 1969; R. Weiss, 1970; Welch, 1967). The combined results of these studies helped generate what has been called the "pattern of discrimination" theory (Gwartney, 1972). This theory contends that even highly qualified blacks are relegated to low skill, menial jobs because white resistance to the employment of blacks is strongest at the higher echelons of the employment hierarchy.

Further investigations conducted during the 1970's offered alternative explanations. These studies proposed that the weak effect of education on black income was due to regional differences in quality of schooling available to blacks (L. Weiss and Williamson, 1972, 1975; Welch, 1973). For blacks, the largest relative returns to education were in the north and smallest in the rural south. However, education was found to have a strong and consistent effect on black incomes throughout the nation as a whole. It was indicated that earlier studies using 1960's Census data had erred by not considering the full implications of variations in schooling quality particularly in the south. Although a gap was still present between black and white returns to education, it had decreased between 1960 and 1970. The effect of education on earnings had become more similar for both blacks and whites. Improvement was most pronounced for college educated blacks. Smith and Welch (1977) attributed this in part to the

increased number of blacks attending integrated colleges.

Sex and race are key factors operating in conjunction with education and affecting occupational returns. A prevalent view among labor economists in the early 1970's was that black women, particularly those who were better educated, did not experience racial discrimination in the labor market (Freeman, 1971).

The Michigan Survey Research Center revealed a mean difference of $5,000 in annual pay between men and women with comparable skills and experience working fulltime in 1969. Cohen (1971) reported that the median income of women in 1969 was about55 percent of that received by men. A comparison between male and female earnings by education, race, and age for the period 1960 to 1970 indicated that the cost of female sexuality was high and had risen during the decade for all levels of education. The highest cost was experienced by females with at least four years of college education. Racial differences in the costs attributed to being female were rather slight. The income of black females relative to black males improved in most instances, but this was found to reflect racial discrimination against black males rather than gains by black females (Niemi, 1977).

Gwartney (1972) found little income difference between female, white and non-white, college graduates. However, for those non-white women with lower levels of education, income differences did occur. Considering only women who worked fulltime, King (1978) found that black women earned only 85 percent of that earned by white women. Taken together, these studies indicate that while racial discrimination

against highly educated black women in the labor market may be slight, black women of less education are indeed discriminated against.

Wolff (1977) conducted extensive studies of the effect of educational attainment on occupational earnings with respect to race and sex data from the 1960 and 1970 Public Use Censuses. His results showed that the primary effect of schooling on earnings was to sort individuals into high-paying or low-paying occupations. However, within an occupation, earnings were generally insensitive to years of schooling, except for a few specific occupations where rather clearly defined educational prerequisites exist. There were no occupations within which earnings were sensitive to educational attainment for blacks. Sensitivity of earnings to education within occupations was greater for white males than for white females, although more so for white females in 1970 than in 1960, and far more so for whites of both sexes than for blacks.

These studies found that men, on the average, earned over twice as much as women in both decennial years. Women were concentrated in traditionally female occupations, which tended to be at the bottom of the earnings scale. Nevertheless, mean earnings for men exceeded those for women even in the primary female occupations. Despite this, a strong correlation was evident between mean schooling and mean earnings across occupations. Wolff concluded that schooling functions to sort individuals into occupations. A secondary function of schooling is to sort individuals within occupations. However, the latter relationship is much weaker.

Statement of Problem

Few studies have appeared in the research literature that deal with job quality in a broader sense than merely income. Yet, in a highly complex technological society such as that existing in the United States, considerable value has been placed on work satisfaction, quality of the employment situation and the work environment. In their choice of employment, workers seek improvements in job quality. The ends sought by workers are not solely those of monetary reward.

This analysis focuses on an expanded consideration of job quality and its relationship to educational attainment. Besides income, the factors of occupational type (using categories such as professional or laborer), degree of supervisory responsibility, and several measures of work autonomy are analyzed by race and sex. The general hypothesis is that job quality returns to education are positive for all employment indicators among race and sex groupings.

The research problem has two facets. First, the purpose is to determine whether there is a constant relationship between level of educational attainment and a variety of job quality indicators. Second, the objective is to investigate variations in these relationships when controlling level of educational attainment for race and sex groups. Extension of the analysis to consider these particular population groupings will contribute to knowledge about the career development process. Rather than focusing on stages in the individual career, as in theories of career development (Super, 1957, 1968; Joordaan,

1974), attention is focused on critical population groupings. Subtleties in job quality differentiation are in need of empirical documentation. Moreover, the specific nature of black-white and male-female differences in job quality returns to education are even more critical perhaps than are trends in either race or sex differences. In this we refer to the specific race-sex linked differences associated with various levels of educational attainment. Patterns of race-sex linked differences are indicative of the cost in adulthood of dropping out of the educational process at key points for important population subgroups. The education or training attained and the vocational choices individuals make during the first ten years after high school in large measure forecast the course of their career development (Gottfredson and Brown, 1981).

METHODS

Sample

The data used in this analysis were obtained using a two phase sampling procedure. In phase I high schools in selected counties designated as rural and economically disadvantaged, in Alabama, Georgia, Louisiana, Mississippi, South Carolina and Texas, were sampled. These states represent a crescent extending across the deep south. Researchers in each state acted independently in choosing the counties and the number of high schools sampled (Cosby and Charner, 1978). The resulting sample of counties has been documented as demographically similar (Thomas, 1970; Lever, 1969; White, 1974; Howell, 1977). Questionnaires were administered to all sophomores in

attendance at the sampled school on any given contact day during spring 1966. A second questionnaire was administered to seniors attending the same high schools two years later.

Phase II of the sampling design was conducted in 1972 when a panel was formed from approximately 5,000 youth who had participated in both the 1966 and 1968 studies. Individual state panels consisted of 250 participants each, stratified 50:50 by race and 60:40 by sex with the larger proportion for males (Howell and Frese, 1981). Not all states could achieve the desired number of black panel members. This, along with unlocatable cases and refusals,resulted in a sample of 1,228 panel participants from a possible 1,500 and 82 percent of the original sample.

Using the same sample as in Phase II, a mail contact procedure supplemented by telephone interviews and finally, personal interviews was conducted in 1979 that produced 964 completed questionnaires from 78.5 percent of the 1972 panel members. The recontacted panel members were 35.3 percent black and 45.5 percent female.

Measurement Procedures

Concern of this investigation is the relationship between educational attainment and job quality. Educational attainment is identified as the independent or causal condition used to differentiate several dimensions of job quality by race and sex. In this section we describe the operational definitions used in measuring both the inde-

pendent and dependent variables.

Independent Variable. Level of educational attainment was determined by asking panel participants to indicate all of the educational or special training programs they had completed. A list of eleven kinds of programs was presented.[1] The range of attainments was reduced to five by combining logically similar categories. These five educational levels were: (1) high school or less (2) technical training, (3) junior college, (4) bachelor's degree, (5) post college.

Dependent Variables. Six variables are used to reflect different dimensions of the dependent factor conceptualized as job quality. These include the status ranking of the current occupation, the income earned, the supervisory responsibility held, and the extent of work autonomy. This latter dimension consists of three specific work conditions: 1) having a say in the speed one works, 2) having a say in the timing of work breaks, and 3) having a say in the number of hours worked per week. Responses to each of the work autonomy variables involved a 3-point scale ranging from (1) seldom (2) to some of the time, (3) to most of the time.

The occupation variable was specified in terms of the U.S. Census classification and summarized into six types, plus housewife. The different occupational types used were: (1) professional and technical, (2) managerial and administrative,(3) sales and clerical, (4) craft and foreman, (5) operative and service, (6)unskilled labor, and (7) housewife . In a general sense, these categories represent an inverse occupational status ranking with the lowest score representing the highest rank.

Income was defined as the average monthly take-home pay from the current job. The range of incomes was collapsed into four income levels: (1) $1-$549, (2) $550-$799, (3) $800-$1,199 (4) $1,200 or more.

Responsibility in the work place was operationalized in terms of the supervision of other workers. The more workers supervised the greater the responsibility. Supervisory responsibility was measured on four levels: (0) no workers, (1) 1 to 3 workers, (2) 4 to 9 workers, (3) and 10 or more workers supervised.

Special analytical attention was given to the control variables of race and sex. Because of the composition of this deep South sample, only two racial groups were identified - white and black (Negro). These two categories accounted for 99 percent of the respondents. The remaining participants were included in the white category.

Statistical Analysis

The design of this analysis is to determine distributional differences in selected job characteristics associated with different levels of educational attainment. Descriptively, the chi square statistic offers a technique for testing the significance of distributional differences in bivariate relationships. All statistical reported were computed on the full crosstab for the independent and dependent variables as categorized above. For purposes of expediency only one category of the dependent variable is provided in the summary tables presented. Differences are noted for chi square values significant at the .05 and .01 probability levels.

RESULTS

Preliminary Observations

Table 1 presents the data for selected job quality indicators associated with each level of educational attainment. The hypothesized positive relationship existed with respect to all but one of the job quality indicators. As educational attainment level rose, the proportion of those panel members achieving higher quality jobs also rose. In the measure of autonomy, only having a say in the work hours was not found to be related to educational attainment. However, other occupational considerations may operate beyond education to provide autonomy in determining the number of hours one works.

-Table 1 about here -

Reviewing these results by educational attainment, the high school or less level was found to have the smallest proportions of persons reaching the top of the job quality hierarchy. The autonomy measures of having a say in work speed and the timing of work breaks are rather high starting at 60.3 percent and 47 percent respectively. Larger proportions attained these work conditions, at all educational levels, than might have been expected. Gains realized by the addition of training are relatively minimal, except in having a say in work breaks. Considering the percent gain at each additional education level over the previous level, having a say in work breaks takes its largest incremental jump at this point. This is followed next by having a say in work speed. Thus, for increases in work autonomy,

work autonomy, training beyond high school is a valuable asset, more so than for other job quality indicators.

The value of obtaining a junior college degree without continuing into a bachelor's program is sometimes questioned. These data indicate a definite positive value of such attainment on job quality. The proportion of those earning $800 or more per month increased most at this level, rising nearly 17 percent over the high school plus training level. Proportions supervising four or more people and having a high degree of say in work speed also increased most at this level. While not at its most dramatic advancement, proportions of those attaining professional-technical or managerial-administrative (PTMA) positions rose substantially and say in work breaks continued to rise at the junior college level.

The largest percentage gain in the proportion attaining PTMA positions occurred at the bachelor's level. The second largest gain in say in work breaks occurred here as well. Gains in earnings, supervisory responsibility, and say in work speed were small. This would appear to indicate that in these three areas returns to bachelor's over a junior college degree are not large.

Those at the post college level of educational attainment accrue a 25 percent gain in the occupation prestige category, over those attaining only the bachelor's level for an impressive total of 92.8 percent in PTMA positions. The percentage change for other job quality indicators was either slight or in a negative direction. It must be considered, however, that at the time this information was collected

persons having attained post college education had been in the job market two to five years less than those holding bachelor's degrees. This fact probably partially accounts for the negative percentage change. It is to be expected that for those indicators for which proportional decreases were found, more time in the labor force is required for positive gains to be evidenced for the post college level.

Observations by Race

Analysis of job quality revealed a consistent pattern of difference associated with educational attainment between blacks and whites. The most dramatic difference was in job quality at the lowest educational levels. These differences tend to narrow at higher levels of education for most quality indicators, especially income and having a say in the timing of work breaks.

Separate analysis for each racial group showed that educational attainment was positively associated with improved job quality for four indicators and partially associated for another. Positive relationships for both whites and blacks existed for occupational status, average monthly income, having a say in the speed one works, and having a say in the timing of work breaks. Job responsibility for the supervision of other workers increased with educational attainment for whites but not significantly for blacks. Neither whites nor blacks realized a consistent pattern of control over having a say in the hours worked per month.

-Table 2 about here-

The largest percentage gain in occupational status for both race categories was still at the bachelor's level; however, the gain for blacks relative to whites was much greater. For blacks,the figures increased from 15.6 percent at the junior college level to 62.1 percent for bachelor's level attainers in this top occupational status classification. Obtaining a bachelor's was more crucial to reaching a PTMA position for blacks than for whites. At the post college level, 95.4 percent of whites and 82.3 percent of blacks obtained PTMA positions.

Previously it had been noted that the largest increase in the percent of persons earning $800 or more annually was at the junior college level. This held quite strongly for whites but for blacks the rise was slight. For blacks, the critical point occurs at the bachelor's level. A junior college education had little monetary return for blacks over high school plus training. At both the bachelor's and post college levels, the degree of black-white differential decreased substantially. At the post college level, the proportion of blacks earning $800 or more monthly was virtually the same as that for whites.

The responsibility variable, reflected in the supervising of four or more people, also revealed race differences at most educational levels. The largest increase in the percentage having such responsibility occurred at the junior college level for both whites and blacks. However, while the proportions were within two percentage points of one another at the high school plus training level, whites

gained some 17 percentage points at the junior college level; whereas the increase for blacks was only some 5 percentage points. Indeed, concerning the responsibility aspect of job quality, tests of significance indicated a strong return to education ($p < .01$) for whites but none for blacks.

Race differences occurred also for the various dimensions of work autonomy. The largest gain in autonomy was at the high school plus training level for whites. Black gains in say in work speed were substantial at this point also, but the increase was twice as large at the junior college level. For having a say in work breaks, the largest increase did not occur for blacks until the bachelor's level was reached. Thus, in order to match the proportion of whites having a say in work speed and breaks at the high school plus training level, blacks must have attained the junior college or bachelor's level, respectively. There was, however, a substantial decrease in the proportion of whites having say in work breaks at the post college level, that did not occur for blacks. The result is to make the two groups more similar at the highest educational level. Although at no point did blacks achieve proportional parity with whites, higher education generally led to a decrease in black-white attainment differences on all job quality indicators.

Observations by Sex

With sex held constant, statistically significant associations between level of educational attainment and four of the six indicators of job quality were observed for both males and females. As

hypothesized, a positive association existed for occupational status, income, having a say in one's work speed and to a lesser extent for women, having a say in the timing of work breaks. No relationship was detected for either males or females between their level of education and having a say in the hours worked. The indicator most clearly describing a sex difference was the significant association between educational attainment and supervisory responsibility for men; whereas no such relationship existed for women.

-Table 3 about here -

A comparison of the male and female percentages for each level of educational attainment indicates the sex difference in job quality rewards. Occupational status was the only quality indicator on which women fared better than men at both the junior college and bachelor's levels. The percentages of women with junior college or bachelor's level educations who hold PTMA positions exceeds those for men by 24 and 10 percent, respectively. The largest percentage gain in PTMA jobs also occurred at the bachelor's level for both males and females. However, at the post college level almost 5 percent more males held PTMA positions than did females. This reversal was the result of a percentage increase for males almost twice that for females. Thus, while junior college and bachelor's level of educational attainment tend to favor the occupational advancement of women relative to men, at the post college level the proportion of men holding PTMA positions again exceeds that of females.

Men earn considerably more per month than women at all educational levels. The differences narrowed somewhat at the highest levels but were consistently large. There were some 43 to 58 percent fewer females than males with monthly incomes of $800 or more at all levels of educational attainment. Both groups realized lower proportions at the post college level, but this is probably due to the more recent entrance into the work force of those achieving post college education.

Males with junior college degrees had the largest gain in the proportion having supervisory responsibilities. Females began low on this indicator and remained low, attaining a high of only about 20 percent, compared to 46 percent for males with a college education.

Generally, men experienced more work autonomy than women at all levels of education. The one exception was in having a say in work speed where the proportions for both sexes were similar at the junior college level. With regards to having a say in the timing of work breaks, percentage differences were as large as 34 percent, with the largest differential being at the post graduate level. As with the other job quality indicators, the female proportions were consistently low compared to those for males even when educational attainment was high.

Observations by Race and Sex

When controlling for both race and sex simultaneously, the sample size in the given categories is reduced considerably. Still this further analysis of race-sex interaction is insightful. The most distinctive finding is that educational attainment is associated

with occupational status within all race-sex groups. To a lesser extent the same was true for income. Results were mixed for the remaining job quality indicators. Supervisory responsibility was associated with educational level among white males and females but not for blacks. Having a say in work speed was related to level of education for women, regardless of race, but not for men. The autonomy indicator of having a say in work breaks was associated with educational attainment for each race-sex group except black males. Finally, having a say in work hours again failed to be significant for any of the race-sex groups.

Further analysis of the percentage distributions within each race-sex group at the various levels of educational attainment points up the extent of job quality variability. White males consistently scored better on each of the six quality indicators. An exception was the higher proportions of white women in PTMA occupations who had junior college, bachelor's or post college degrees and for black males with post college degrees. More than 41 percent of white women at the junior college level classified their occupation as PTMA, somewhat reflecting the greater availability of programs such as practical nursing which prepare primarily women for entry into technical occupations.

-Table 4 about here -

For white males, the largest percentage gains for PTMA positions, and also the highest overall proportions, occurred at the bachelor's

and post college levels. This was also true for black males, although the proportion of black males was lower than that for white males at the bachelor's level, and higher at the post college level. Proportions for white females increased substantially at the higher education levels. Beginning with junior college, proportions of white females attaining PTMA positions were actually larger than those of white males. Larger proportions of black females attained PTMA jobs than black males at the high school or less, junior college, and bachelor's levels of educational attainment, but less than white females at each level excepting high school or less.

Both white and black males had larger proportions with monthly pay of $800 or more at all educational levels, than did either black or white females. Black males realized no gains in the proportion in this highest earnings category with the addition of training after high school, and white males actually declined nearly 8 percent with additional training. Still, black males had smaller proportions receiving high income than white males up to the post college level. At the bachelor's and post college levels the percentage for white males decreased while that for black males continued to increase. Thus, black males had a larger proportion earning $800 or more monthly at the post college level, but still did not equal the white male proportions of the junior college level or even the lower proportion at the bachelor's level. For white females the largest percentage gain did not occur until the post college level, and even then the proportion was some 53 percent compared to some 76 and 83 percent for

white and black males, respectively. Black females, however, experienced an extremely large gain at the bachelor's level, bringing them up to some 56 percent at this level, with a slight drop to somewhat less than 55 percent at the post college level. Thus, black females were substantially better off than white females with a bachelor's degree, and somewhat better off at the post college level. Unfortunately, neither black nor white females at any level of education attained a proportion making $800 or more equal to that of white males with only a high school education.

In achieving job responsibility for supervising the work of others the addition of training after high school resulted in a decrease of approximately 10 percent for white males. The largest percentage gain observed in those having responsibility was at the junior college level for white males and at the post college level for white females. White females at no educational level achieved a proportion with supervisory responsibility equal to that achieved by white males with only a high school or less level of education. The relationship between educational attainment and achievement of responsibility was not significant for either black males or black females. This breakdown reveals that it is black females rather than all females, for whom there fails to be an increase in responsibility associated with educational attainment.

For males, both black and white, having a say in work speed was not significantly related to educational attainment, whereas for both black and white females this was a significant relationship. The lar-

gest percentage gain was at the junior college level for both black and white females. At this level black females had an advantage over white females but thereafter proportions for black females declined, placing them below white females at the two highest educational levels.

Having a say in work breaks was not significantly related to education for black males, but was for white males. For whites, both male and female, the largest percentage gain occurred at the high school plus training level. Both white and black females had lower proportions at all levels than did white males. The largest gain for black females was at the junior college level, which placed them ahead of white females at this point. Although the proportions for both black and white females decreased at each higher level of education, black females with a bachelor's degree remained ahead of white females at all levels up to the post college level. At no point did female proportions for having a say in work breaks equal those of white males at just the high school plus training level.

DISCUSSION

The findings of this analysis lend support to a previous study by Gwartney (1972) who showed that income differentials between white and black females diminished with education. White men and women are more likely to attain better job quality than are black men and women at the lowest educational levels, but this difference diminishes at the bachelor's level and even favors blacks with a post college education. These findings would seem to refute the "pattern of discrimination" theory which maintains that racial differences are inherent in, and

increase with, educational attainment in American culture. Certainly, based on these findings this contention is debatable.

Among the variety of job quality indicators considered, occupational type was found to be the most highly related to educational attainment, even more than income. This difference may result from the broad occupational categories used. Perhaps occupational prestige scores conveying a more ordinal ranking would provide a somewhat different pattern. Nevertheless, these findings are consistent with those of Hirsch and Segelhorst (1965) who found that supervisory responsibility, although reflective of educational attainment, responded less directly to education than did either occupation or income.

Overall, level of educational attainment is positively related to job quality indicators. However, breakdowns by race and sex show this to be untrue in some instances. For blacks attaining supervisory status is not significantly related to education. For white and black males say in work speed is not, and for black males say in work breaks is not significantly related to educational attainment. The lack of significant relationships here indicates strong race-sex differences.

Other race-sex differences are identifed as well. In general, whites achieve more job quality returns to education than blacks and males accrue more returns to education than females. Specifically black males at the post college level are more likely to gain professional and managerial jobs, earn $800 or more monthly, supervise four or more people, have a say in the speed worked and have

a say in the timing of work breaks than are white males. Post college education has resulted in good job quality positions in the labor force for black males achieving such high levels of education.

This study found that for southern rural populations discrimination is still present in the workplace. This discrimination is probably fostered from two directions. First, there is little reason to doubt that many employers continue to show preference for white males over blacks and women. Second, the occupational expectations and career goals of blacks and, particularly women serve to channel them into stereotyped employment where traditional patterns of discrimination may be most deeply entrenched. In many instances these inequalities in prestige, pay, and responsibility are only partly mitigated by educational attainment. However, different educational levels have differing results for the various race and sex groups. No one type of educational attainment can provide the greatest opportunity for all dimensions of job quality. Personal decisions as to the importance of specific aspects of the employment situation must be made with respect to the value of continuing education.

These findings are limited by the fact that this sample of young adults originated in rural areas and small town settings in the South. Many of them had migrated to urban areas but the majority remained in the same vicinity where they grew up. Clearly, rural and small town employers would be expected to follow more traditional employment practices than would be anticipated in larger, more heterogeneous settings. Employment opportunities in small towns and rural areas are

less varied and tend to be of lower status. However, we do not believe that differences between rural and urban job settings are sufficient to account for the distinct pattern of job quality differentials observed. Further studies of urban samples, we predict, will result in similar findings.

References

Becker, G. S., Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education, New York, 1964.

Cohen, Malcom S., "Sex Differences in Compensation," Journal of Human Resources, 6(Fall 1971):434-437.

Cosby, Arthur G. and Ivan Charner (Editors), Education and Work in Rural America: The Social Context of Early Career Decision and Achievement, Houston: Stafford-Lond, 1978.

Freeman, Richard B., Black Elite: The New Market for Highly Educated Black Americans, New York: McGraw-Hill, 1976.

Gottfred, L.S. and Vicky C. Brown, "Occupational Differentiation Among White Men in the First Decade After High School," Journal of Vocational Behavior, 19(1981):251-289.

Gwartney, James D., "Payoffs of a College Degree," Journal of Human Resources, 7(Winter 1972):60-70.

Hanoch, G., "Personal Earnings and Investment in Schooling," Unpublished Doctoral Dissertation, University of Chicago, 1965.

Hansen, W. Lee, "Total and Private Rates of Return to Investment to Schooling," Journal of Political Economy, 71(April 1963):128-140.

Hirsch, Werner Z. and Elbert Segelhorst, "Incremental Income Benefits of Public Education," Review of Economics and Statistics, (November 1965):392-399.

Howell, Frank M., "Occupational Knowledge: Its Impact on the Career Plans and Early Status Attainment" Sociology of Work and Occupations, 5(August 1978):315-339.

Howell, Frank M. and Wolfgang Frese, The Southern Youth Study: 1966-1979, (Monograph) Department of Sociology and Rural Life, Mississippi State University, June 1981.

Joordaan, J.P., "Life Stages as Organizing Modes of Career Development," In E. L. Hera (Ed.), Vocational Guidance and Human Development. Boston: Houghton Mifflin, 1974.

King, Allan G., "Labor Market Racial Discrimination Against Black Women," The Review of Black Political Economy, 8(Summer 1978): 325-335.

Lever, Michael F., "Selected Occupational Status Projections of Southern Youth: An Analysis by Sex, Race and Socioeconomic Status," Unpublished Master's Thesis, Texas A&M University, 1969.

Link, C. R., "Black Education, Earnings and Interregional Migration: A Comment and Some New Evidence," American Economic Review, 65(1975):236-240.

Niemi, Albert W., "Sexist Earnings Differences: The Cost of Female Sexuality," American Journal of Economics and Sociology, 36(January 1977):33-40.

Siegel, Paul M., "On the Cost of Being Negro," Sociological Inquiry, (Spring 1965):4-57.

Smith, James P. and Finis R. Welch, "Black-White Male Wage Ratios: 1960-70," American Economic Review, 67(June 1977):328-388.

Super, D.E., The Psychology of Careers, New York: Harper and Row, 1957.

Super, D.E., "A Theory of Vocational Development," (In D.G. Zytowski Ed.), Vocational Behavior: Readings in Theory and Research. New York: Holt, Rinehart & Winston, 1958.

Thomas, Katheryn, "Educational Orientations of Southern Rural Youth: An Analysis of Socioeconomic Status and Racial Differences," Unpublished Master's Thesis, University of Kentucky, 1970.

Thurow, L., Poverty and Discrimination, Washington, 1969.

Weiss, L. nd Jeffery G. Williamson, "Black Education, Earnings and Interregional Migration: Some New Evidence," American Economic Review, 62(June 1972):372-383).

Weiss, L. and Jeffery G. Williamson, "Black Education, Earnings, and Interregional Migration: Even Newer Evidence," American Economic Review, 65(March 1975):241-244.

Weiss, R. D., "The Effect of Education on the Earnings of Blacks and Whites," Review of Economic Statistics, 52(May 1970):150-159.

Welch, Finis, "Labor Market Discrimination: An Interpretation of Income Differences in the Rural South," Journal of Political Economy, 75(June 1967):225-240.

Welch, Finis, "Black-White Differences in Returns to Schooling," American Economic Review, 63(December 1973):893-907.

White, Carolyn D., "The Social Mobility-Fertility Hypothesis: A Racial and Class Comparison Among Southern Females," Unpublished Master's Thesis, Texas A&M University, 1974.

Wolff, Edward N., "Schooling and Occupational Earnings," Review of Income and Wealth, (Summer 1977):259-278.

FOOTNOTES

[1]Eleven kinds of education programs and their codes included: 1) some high school, 2) high school, 3) military training, 4) vocational-technical, 5) business or clerical, 6) practical nursing, 7) associate degree junior college, 8) bachelor, 9) master, 10) professional, or 11) doctoral programs.

Table 1. Percent of Study Participants Attaining Different Levels of Education Related to Selected Indicators of Job Quality

Level of Educational Attainment	Job Quality Indicators					
	Occupational Status	Income	Responsibility	Autonomy		
	(PTMA) Prof.-tech. managers-admin.	Adv. monthly take home pay of $800 or more	Supervising 4 or more people	Say in work: Speed	Breaks	Hours
High school or less	13.9	37.7	19.8	60.3	47.0	36.3
High school + training	19.6	45.1	20.0	69.6	60.4	33.6
Junior college	30.6	61.9	34.0	83.5	67.2	31.3
Bachelors	67.8	67.3	36.9	85.0	75.6	43.9
Post college	92.8	65.1	34.2	89.2	69.1	35.8
Chi square	386.06*	100.14*	39.23*	56.51*	41.98*	8.68
Degrees of freedom	24	12	12	8	8	8

* Probability < .01
** Probability < .05

Table 2. Percent of Study Participants Attaining Different Levels of Education Related to Selected Indicators of Job Quality, Controlling for Race.

Level of Educational Attainment	Job Quality Indicators											
	Occupational Status (PTHM) Prof.-tech. Managers-admin.		Income Adv. monthly take home pay of $800 or more		Responsibility Supervising 4 or more people		Autonomy Say in work breaks		Say in work speed		Say in work hours	
	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black
High school or less	16.2	9.7	42.9	24.9	22.2	16.5	53.1	37.9	69.0	47.7	41.7	28.4
High school + training	25.7	11.2	51.4	36.0	20.7	19.0	71.8	44.6	77.8	58.0	37.8	27.5
Junior College	36.8	15.6	71.0	37.9	37.9	24.1	74.1	51.4	85.2	79.4	38.8	14.3
Bachelors	69.2	62.1	68.3	63.1	39.7	26.5	77.2	69.4	86.8	78.4	44.4	41.7
Post college	95.4	82.3	65.1	64.7	36.5	25.0	69.2	68.8	90.9	82.4	40.6	17.6
Chi square	265.27[A]	119.06[A]	73.51[A]	35.51[A]	27.80[A]	9.27	29.02[A]	16.02[AA]	26.75[A]	21.14[A]	8.64	12.60
Degrees of freedom	24	24	12	12	12	12	8	8	8	8	8	8

[A] Probability < .01
[AA] Probability < .05

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Table 3. Percent of Study Participants Attaining Different Levels of Education Related to Selected Indicators of Job Quality, Controlling for Sex.

Level of Educational Attainment	Job Quality Indicators											
	Occupational Status (PTHA)		Income		Responsibility		Autonomy					
	Prof.-tech. managers-admin.		Adv. monthly take home pay of $800 or more		Supervising 4 or more people		Say in work speed		Say in work breaks		Say in work hours	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
High school or less	24.0	7.5	67.8	12.8	29.2	11.7	69.8	52.5	58.8	37.3	41.2	32.2
High school + training	25.2	12.4	62.5	19.2	23.1	15.3	74.2	63.1	64.2	55.0	35.9	30.3
Junior college	30.1	32.5	81.4	22.9	41.4	18.2	83.1	84.2	69.2	63.2	33.3	27.0
Bachelors	64.1	74.6	82.7	38.2	46.2	19.6	87.6	80.0	84.8	58.3	52.7	27.1
Post college	95.2	90.3	76.9	33.7	42.5	15.6	90.7	87.5	85.7	51.3	56.1	15.0
Chi square	188.78[A]	237.30[A]	31.69[A]	72.42[A]	33.88[A]	17.82	23.02[A]	31.38[A]	28.57[A]	18.90[A]	14.50	6.21
Degrees of freedom	24	24	12	12	12	12	8	8	8	8	8	8

[A] Probability < .01
[AA] Probability < .05

Table 4. Percent of Study Participants Attaining Different Levels of Education Related to Selected Indicators of Job Quality, Controlling for Race and Sex.

Level of Educational Attainment	Job Quality Indicators																							
	Occupational Status (PTHA) Prof.-tech. managers-admin.				Income Adv. monthly take home pay of $800 or more				Responsibility Supervising 4 or more people				Autonomy Say in work speed				Say in work breaks				Say in work hours			
	WH	BH	WF	BF	WH	BH	WF	BF	WH	BH	WF	BF	WH	BH	WF	BF	WH	BH	WF	BF	WH	BH	WF	BF
High school or less	32.3	8.8	5.5	10.4	75.5	54.6	14.1	11.1	34.5	21.1	11.0	12.8	78.0	56.8	51.2	41.2	62.3	52.8	44.8	27.5	46.7	32.4	37.3	25.5
High school+training	31.6	15.0	17.0	7.2	67.8	54.5	24.1	13.3	24.2	21.4	14.8	15.9	83.2	60.9	69.8	54.2	72.6	51.6	70.5	35.4	40.0	29.5	34.4	25.0
Junior college	34.5	12.6	41.7	18.8	87.3	60.0	28.6	14.2	41.6	33.3	21.1	14.2	86.4	72.2	81.8	87.5	79.7	36.8	59.1	68.8	40.7	10.5	33.3	18.8
Bachelors	65.3	56.3	78.6	66.6	84.4	71.5	33.8	56.3	47.8	37.6	21.1	16.7	88.5	82.4	82.5	75.0	86.5	75.0	55.0	65.0	56.3	31.3	15.4	50.0
Post college	94.5	100.0	96.6	72.7	75.8	83.3	53.3	54.5	40.0	60.0	32.1	9.1	89.2	100.0	93.1	72.7	83.3	100.0	51.7	50.0	57.1	50.0	20.7	0.0
Chi square	135.13[A]	57.62[A]	169.62[A]	82.61[A]	22.57[AA]	22.57[AA]	9.9[A]	43.12[A]	22.29[AA]	12	21.4[AA]	7.69	13.51	8.17	16.10[AA]	17.52[AA]	19.02[AA]	12.75	18.31[A]	15.44[AA]	11.94	11.24	9.63	14.78
Degrees of freedom	20	20	24	24	12	12	12	12	12	12	12	12	8	8	8	8	8	8	8	8	8	8	8	8

[A] Probability < .01
[AA] Probability < .05

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